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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,480	02/22/2002	Jwo-Huei Jou	MR3003-10	6697

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ELLICOTT CITY, MD 21043

EXAMINER

KRISHNAN, SUMATI

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/079,480

Applicant(s)

JOU ET AL.

Examiner

Sumati Krishnan

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-22 is/are rejected.
- 7) ☒ Claim(s) 6-8 and 23-25 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 15 is objected to because of the following informalities: the word “comprising” is repeated. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear as to whether the applicant is claiming the drying film provided on the surface of said opposed electrode, or whether the applicant is claiming the reaction between the raw material and the gaseous reactant happening on the surface of the opposed electrode. Examiner has taken the first of these two options to be what applicant intended to claim. If this is the case, please add two commas into the phrase so that it reads “forming a drying film, by providing a raw material to react with a gaseous reactant, on the surface of said opposed electrode.”

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakaguchi et al (US 5990615).

Regarding claim 9, Sakaguchi discloses an EL device with a drying film. Applicant discloses that suitable materials for the drying film include MgO. Sakaguchi's invention discloses that a suitable material for layer 8, (shown for example in figure 1), is MgO. Thus applicant's drying film reads on Sakaguchi's MgO layer 8. Sakaguchi also discloses a substrate, 1, at least one transparent electrode, 2, formed on the surface of the substrate, an organic layer, (3-6), formed on the surface of said transparent electrode, an opposed electrode (cathode 7) formed on the surface of said organic layer, and a drying film, 8, formed on the surface of said opposed electrode, see figure 1.

The limitation in the last paragraph of claim 1 reading "wherein said drying film is formed by...." is considered a product-by-process claim limitation and accordingly is not afforded patentable weight. Although process limitations may exist in product claims, patentable weight rests on the product claimed not the process by which it is made. See MPEP 2113.

Regarding claims 10-11, Sakaguchi discloses the drying agent to be MgO, thus the "raw material" of the drying agent 8 to be Mg, which is an alkaline metal.

Regarding claims 12-13, Sakaguchi discloses the drying agent to be MgO, thus the gaseous reactant with the raw material Mg is oxygen.

Regarding claims 14 and 17, Sakaguchi discloses a sealing layer, 9, to cover the exposed portions of the substrate, the transparent electrode, the organic layer, the opposed electrode and the drying film.

Regarding claims 15-16, Sakaguchi discloses the EL element with a drying film comprising a moisture-absorbing film. See layer 8, MgO.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakaguchi et al (US 5990615).

Regarding claims 1 and 18, Sakaguchi discloses an EL device with a drying film, comprising the steps of providing a substrate, 1, forming in sequence from substrate up, a transparent electrode, a luminescent layer, an opposed electrode and forming a drying film on said opposed electrode.

Sakaguchi does not explicitly disclose the method of which the drying film, MgO is formed. However, it is old and well known in the art that in order to form an oxide of an element, one needs to provide the element to react with a gas, namely oxygen. Therefore, it would have been obvious to one of ordinary skill in the art to have provided the raw material Mg with the gaseous reactant oxygen in order to provide the disclosed material, MgO.

Regarding claims 2-5, and 19-22, Sakaguchi discloses that the drying film 8 is MgO, an alkaline earth metal oxide.

Allowable Subject Matter

Claims 6-8 and 23-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 6-7 and 23-24, the prior art of record neither shows nor suggests the drying form formed on the surface of said opposed electrode in a chamber wherein said gaseous reactant is provided by a gaseous reactant supplier which then flows in a path towards a channel through which said raw material passes.

Regarding claims 8 and 25, the prior art of record neither shows nor suggests the raw material being introduced towards said opposed electrode by one of evaporation or sputtering.

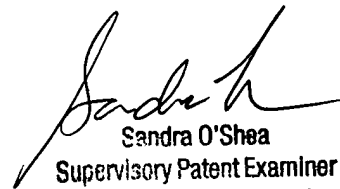
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumati Krishnan whose telephone number is 703-305-7906. The examiner can normally be reached on 8:00 am - 4:30 pm..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 703-305-4939. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

SK



Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800